

**WHAT IS CLAIMED IS**

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1. A semiconductor integrated circuit,  
comprising:

10 a check unit which compares a value of a  
pixel of interest with values of neighboring pixels  
contained in an image signal supplied from an image  
sensor, and determines based on the comparison  
whether the pixel of interest is defective; and

15 a defect correcting unit which corrects  
the value of the pixel of interest by using values  
of surrounding pixels in response to the  
determination by said check unit that the pixel of  
interest is defective.

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2. The semiconductor integrated circuit as  
claimed in claim 1, wherein said check unit  
ascertains that the pixel of interest is defective  
25 in response to a detection that the value of the  
pixel of interest differs from the values of the  
neighboring pixels by more than a predetermined  
value.

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3. The semiconductor integrated circuit as  
claimed in claim 2, wherein said check unit  
35 includes:

a first comparison unit which determines  
whether the value of the pixel of interest differs

from the values of the neighboring pixels by more than a first predetermined difference in a first pixel-array direction;

5 a second comparison unit which determines whether the value of the pixel of interest differs from the values of the neighboring pixels by more than a second predetermined difference in a second pixel-array direction;

10 a defect checking unit which ascertains that the pixel of interest is defective if both said first comparison unit and said second comparison unit determine that the value of the pixel of interest differs from the values of the neighboring pixels by more than the respective predetermined  
15 differences.

20 4. The semiconductor integrated circuit as claimed in claim 3, wherein said first comparison unit determines whether the value of the pixel of interest differs from an average of the values of the neighboring pixels by more than the first  
25 predetermined difference in the first pixel-array direction, and said second comparison unit determines whether the value of the pixel of interest differs from an average the values of the neighboring pixels by more than the second  
30 predetermined difference in the second pixel-array direction.

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5. The semiconductor integrated circuit as claimed in claim 1, wherein said defect correcting

circuit includes:

a corrected-value generating unit which generates a corrected value by correcting the value of the pixel of interest based on an average of the values of the surrounding pixels; and

a switch unit which selects either the corrected value or the image signal from the image sensor in response to the determination by said check unit.

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6. A method of correcting a defect pixel in an image signal supplied from an image sensor, comprising the steps of:

comparing a value of a pixel of interest with values of neighboring pixels contained in the image signal supplied from the image sensor;

determining, based on the comparison, whether the pixel of interest is defective; and

correcting the value of the pixel of interest by using values of surrounding pixels in response to the determination that the pixel of interest is defective.

7. The method as claimed in claim 6, wherein said step of determining ascertains that the pixel of interest is defective in response to a detection that the value of the pixel of interest differs from the values of the neighboring pixels by more than a predetermined value.

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8. The method as claimed in claim 7,  
wherein said step of determining includes:

5 a first comparison step of determining  
whether the value of the pixel of interest differs  
from the values of the neighboring pixels by more  
than a first predetermined difference in a first  
pixel-array direction;

10 a second comparison step of determining  
whether the value of the pixel of interest differs  
from the values of the neighboring pixels by more  
than a second predetermined difference in a second  
pixel-array direction;

15 a step of ascertaining that the pixel of  
interest is defective if both said first comparison  
step and said second comparison step determine that  
the value of the pixel of interest differs from the  
values of the neighboring pixels by more than the  
respective predetermined differences.

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9. An image processor, comprising:

25 a check unit which compares a value of a  
pixel of interest with values of neighboring pixels  
contained in an image signal supplied from an image  
sensor, and determines based on the comparison  
whether the pixel of interest is defective;

30 a defect correcting unit which corrects  
the value of the pixel of interest by using values  
of surrounding pixels in response to the  
determination by said check unit that the pixel of  
interest is defective; and

35 a processing unit which processes the  
image signal having undergone defect correction by  
the defect correcting unit.

10. The image processor as claimed in  
claim 9, the processing unit includes at least one  
of a RGB conversion unit, a white balancing unit, a  
5 contour enhancing unit, a gamma correction unit, and  
a format conversion unit.